

I claim:

1                   1.       A telephone having a key pad comprising at least ten number  
2       keys arranged to dial the digits from 0 to 9 inclusive, each of said number keys being  
3       marked with a visual indicator denoting the digit which the number key is arranged to  
4       dial, the number key arranged to dial the digit 1 bearing a first tactile indicator, and  
5       the number key arranged to dial the digit 9 bearing a second tactile indicator  
6       distinguishable by touch from the first tactile indicator, said first and second tactile  
7       indicators not substantially obscuring said visual indicators on said keys bearing said  
8       tactile indicators, said tactile indicators not being the Braille equivalents of the digits  
9       which said number keys bearing said tactile indicators are arranged to dial.

1                   2.       A telephone according to claim 1 having, in addition to said ten  
2       number keys, an on key which must be pressed before said number keys can dial  
3       their associated digits, said on key bearing a third tactile indicator distinguishable by  
4       touch from both said first and second tactile indicators.

1                   3.       A telephone according to claim 2 having, in addition to said ten  
2       number keys and said on key, a send key which must be pressed after pressing said  
3       number keys in order to transmit the digits dialed by said number keys, said send key  
4       bearing a fourth tactile indicator distinguishable by touch from all of said first, second  
5       and third tactile indicators.

1                   4.       A telephone according to claim 1 wherein one of said first and  
2       second tactile indicators comprises a single projection extending from its associated  
3       number key, and the other of said first and second tactile indicators comprises at  
4       least two spaced projections extending from its associated number key.

1                   5.       A telephone according to claim 4 wherein at least one of said  
2       projections has a substantially hemispherical form with the flat surface of the  
3       hemisphere facing said associated number key.

1                   6.       A telephone according to claim 5 wherein said substantially  
2       hemispherical projection has a diameter in the range of about 0.062 to about 0.125  
3       inch (about 1.6 to about 3.2 mm) and a height in the range of about 0.032 to about  
4       0.062 inch (about 0.80 to about 1.6 mm).

1                   7.       A telephone according to claim 4 wherein one of said first and  
2       second tactile projections comprises a pair of spaced, substantially hemispherical  
3       projections with the flat surface of each hemisphere facing said associated number

key, said projections having a spacing between the centers of said two projection, in the range of about 0.093 to about 0.375 inch (about 2.4 to about 9.5 mm).

8. A telephone according to claim 7 wherein each of said hemispherical projections has a diameter in the range of about 0.062 to about 0.125 inch (about 1.6 to about 3.2 mm) and a height in the range of about 0.032 to about 0.062 inch (about 0.80 to about 1.6 mm).

9. A telephone according to claim 1 wherein at least one of said tactile indicators is substantially transparent.

10.. A telephone according to claim 9 said at least one of said tactile indicators comprises a substantially transparent plate overlying at least part of the visual indicator on its associated number key, and a substantially transparent projection extending outwardly from said plate.

11. A telephone according to claim 10 wherein said transparent plate is secured to its associated number key with an adhesive.

12. A telephone according to claim 3 wherein at least one of said tactile indicators comprises an elongate ridge projecting from its associated number key.

13. A telephone according to claim 1 wherein all of said keypad is molded of a single elastomeric material.

14. A telephone according to claim 2 wherein at least one of said tactile indicators is substantially cruciform.

15. A method of modifying a telephone to enable an operator of said telephone to dial "911" by touch, said method comprising:

providing a telephone having a key pad comprising at least ten number keys arranged to dial the digits from 0 to 9 inclusive, each of said number keys being marked with a visual indicator denoting the digit which the number key is arranged to dial;

providing a first auxiliary member comprising a first tactile indicator;

providing a second auxiliary member comprising a second tactile indicator distinguishable by touch from the first tactile indicator,

said first and second tactile indicators not being the Braille equivalents of the digits 1 and 9;

10005585 "102601  
T0920T"

12                   attaching the first auxiliary member to the number key arranged to dial  
13 the digit 1 such that the first tactile indicator does not substantially obscure the visual  
14 indicator on said number key; and

15                   attaching the second auxiliary member to the number key arranged to  
16 dial the digit 9 such that the second tactile indicator does not substantially obscure  
17 the visual indicator on said number key.

1                   16.     A method according to claim 15 wherein at least one of said  
2 first and second auxiliary members comprises, in addition to the tactile indicator, a  
3 substantially transparent plate, and wherein said transparent plate is attached to said  
4 number key, leaving said tactile indicator projecting from said number key..

1                   17.     A method according to claim 16 wherein said at least one of  
2 said first and second auxiliary members comprises a layer of adhesive on the  
3 opposed side of said plate from said tactile indicator and wherein said auxiliary  
4 member is attached to said number key using said layer of adhesive.

1                   18.     A method according to claim 15 wherein said telephone has, in  
2 addition to said ten number keys, an on key which must be pressed before said  
3 number keys can dial their associated digits, and wherein said method comprises  
4 providing a third auxiliary member comprising a third tactile indicator distinguishable  
5 by touch from both said first and second tactile indicators, and attaching said third  
6 auxiliary member to said on key.

1                   19.     A method according to claim 18 wherein said telephone has, in  
2 addition to said ten number keys and said on key, a send key which must be pressed  
3 after pressing said number keys in order to transmit the digits dialed by said number  
4 keys, said method comprising providing a fourth auxiliary member comprising a fourth  
5 tactile indicator distinguishable by touch from all of said first, second and third tactile  
6 indicators, and wherein said method comprising attaching said fourth auxiliary  
7 member to said send key.

1                   20.     Telephone keypad tactile add-ons for modifying a telephone to  
2 enable an operator of said telephone to dial "911" by touch where the telephone has a  
3 key pad comprising at least ten number keys arranged to dial the digits from 0 to 9  
4 inclusive, each of said number keys being marked with a visual indicator denoting the  
5 digit which the number key is arranged to dial, said add-ons comprising:

6                   a first auxiliary member comprising a first tactile indicator;

7 a second auxiliary member comprising a second tactile indicator  
8 distinguishable by touch from the first tactile indicator,

9 said first and second tactile indicators not being the Braille equivalents  
10 of the digits 1 and 9;

11 said first and second auxiliary members being adapted to be attached  
12 to the number key arranged to dial the digit 1 such that the first tactile indicator does  
13 not substantially obscure the visual indicator on said number key and said second  
14 auxiliary member to the number key arranged to dial the digit 9 such that the second  
15 tactile indicator does not substantially obscure the visual indicator on said number  
16 key.

1 21. The add-ons according to claim 20 wherein at least one of said  
2 first and second auxiliary members comprises, in addition to the tactile indicator, a  
3 substantially transparent plate, and wherein said transparent plate is attached to said  
4 number key, leaving said tactile indicator projecting from said number key..

1 22. The add-ons according to claim 21 wherein said at least one of  
2 said first and second auxiliary members comprises a layer of adhesive on the  
3 opposed side of said plate from said tactile indicator and wherein said auxiliary  
4 member is attached to said number key using said layer of adhesive.

1 23. The add-ons according to claim 20 wherein said telephone has,  
2 in addition to said ten number keys, an on key which must be pressed before said  
3 number keys can dial their associated digits, and wherein said add-ons comprise a  
4 third auxiliary member comprising a third tactile indicator distinguishable by touch  
5 from both said first and second tactile indicators, and said third auxiliary member  
6 being adapted to be attached to said on key.

1 24. The add-ons according to claim 23 wherein said telephone has,  
2 in addition to said ten number keys and said on key, a send key which must be  
3 pressed after pressing said number keys in order to transmit the digits dialed by said  
4 number keys, said add-ons comprising a fourth auxiliary member comprising a fourth  
5 tactile indicator distinguishable by touch from all of said first, second and third tactile  
6 indicators, and wherein said fourth auxiliary member is adapted to be attached to said  
7 fourth auxiliary member to said send key.